AMENDMENTS TO THE CLAIMS

1. (Cancelled)

2. (Cancelled)

3. (Cancelled)

4. (Original) A method of denoising data utilizing parallel object-oriented processors, comprising the steps of:

establishing an object-oriented library of denoising techniques based on thresholding of wavelet coefficients including a suite of different wavelet filters, wavelet transforms, boundary treatment rules, threshold calculation methods, threshold application functions, and noise estimation techniques;

using a data distribution algorithm for partitioning said data into contiguous rectilinear collections of regions;

configuring said parallel object-oriented processors according to the resulting partitioning;

choosing a specific wavelet denoising technique specified by a combination of, said wavelet filters, said boundary treatment rules, said threshold calculation methods, said threshold application methods, and said noise estimation methods from said object-oriented library of denoising techniques;

determining the communication requirements based on said partitioning, said parallel object-oriented processors, and said wavelet filters;

mapping said denoising technique onto said parallel object-oriented processors;

denoising said data on said parallel object-oriented processors according to said denoising technique, and

agglomerating the foregoing to obtain said denoised data.

5. (New) The method of denoising data utilizing parallel object-oriented processors of claim 4 wherein said step of establishing an object-oriented library of denoising techniques comprises establishing a library from wavelet filters, or the daubechies family of filters, or the symmlet family of filters, or the coiflet family of filters, or the bi-orthogonal B-spline and V-spline families of filters, or wavelet transforms, or boundary treatment rules, or threshold calculation methods, or threshold application functions, or noise estimation methods.

6. (New) The method of denoising data utilizing parallel object-oriented processors of claim 4 wherein said data distribution algorithm includes using a message passing interface communication library.

7. (New) The method of denoising data utilizing parallel object-oriented processors of claim 4 wherein said step of determining the communication requirements includes using box calculus.